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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,453	04/14/2004	Satchidanand Mishra	D/A1391	8334

7590 08/23/2005

Patent Documentation Center
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Rochester, NY 14644

EXAMINER

TRAN, HOAN H

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,453

Applicant(s)

MISHRA ET AL.

Examiner

Hoan H. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8,11,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-4,7,9,10 and 12-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/14/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - Page 1, lines 2 and 4, US Serial Nos. and filing date of the co-pending applications need to be filled.
 - Page 13, line 8, replace "Lingo-PANi-fillers" with --Ligno-PANi-fillers--.Appropriate correction is required.

Claim Objections

2. Claims 1 and 8-12 are objected to because of the following informalities:
 - Claim 1, line 8, replace "a" with --an--.
 - Claims 8-11, line 2, replace "belt" with --member--.
 - Claim 12, line 2, replace "transfer belt" with --intermediate transfer member--.Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda [JP 2001-305884] in view of Viswanathan et al. ['617]

Fukuda discloses an image forming apparatus [Fig. 1] comprising a latent image carrier [1], developing units [5, 6, 7, 8], an intermediate transfer member [2] including a first binder, polyaniline and at least one sulfonic acid group as a dopant, and a fixing unit [43]. However, Fukuda does not disclose the sulfonic acid group is a ligin sulfonic acid.

Viswanathan et al. disclose a conductive composition of matter comprising a substrate including a first binder, polyaniline, and ligin sulfonic acid [Col 2, lines 45-51; Col. 4, lines 19-31].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the intermediate transfer member disclosed by Fukuda including ligin sulfonic acid as the sulfonic acid group as taught by Viswanathan et al. for the purpose of providing superior template for carrying out polymerization reactions yielding conducting compositions of matter comprising polyaniline due to its high solubility in water, crosslinkability and low cost.

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6. Claims 5, 6, 8, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda in view of Viswanathan et al. as applied to claims 1 and 19 above, and further in view of Yu et al. [‘486]

Fukuda in view of Viswanathan et al., as discussed above, disclose the claimed invention except for the first binder is polyimide.

Yu et al. disclose an image forming apparatus comprising a seamed imaging belt comprises a substrate [32] including polyimide [Col. 8, lines 33-46; Col. 10, lines 15-38] and polyaniline dispersed in any suitable acid for doping polyaniline [Col. 14, line 44 to Col. 15, line 27]; wherein the imaging belt having a surface resistivity of less than 10^5 ohms per square [Claim 4].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first binder of the intermediate transfer member disclosed by Fukuda, as modified by Viswanathan et al., including polyimide as taught by Yu et al. for the purpose of increasing the flexibility of the intermediate transfer member.

Allowable Subject Matter

7. Claims 2-4, 7, 9, 10 and 12-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's

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disclosure:

- Van den Reek et al. ['227] disclose an intermediate medium for transferring a toner image from an imaging medium to a final receiving material.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT
August 21, 2005


HOAN TRAN
PRIMARY EXAMINER